65 / N. Plano Rd #429

GD Air Testing Inc. 903. N. Bowser Rd., #200, Richardson, TX 75081 Tel: (972) 480-8908 Fax: (972) 480-8308

CHAIN OF CUSTODY RECORD

| Report to:                        | Invoice to:                             | ANALYSIS /- 2 / / / /  |
|-----------------------------------|---|--|
| Company: DERRALL TOGERS           | Company:                                | REQUESTED S S  |
| Address:                          | Address:                                | PAGES IED (S)  |
|                                   |   | PAGE 1 OF  |
| 0-4-4                             | Contact                                 | TO-14VOCs + DIESLICANGE (Light Hydrocarbon C,-C, C, N, CH,)  Headspace (Please Specify compounds) TICs by GC/MS SCAN MOLD ID  TOTAL PAGE   |
| Contact:                          | Contact:                                | 7 TOT Page   Pag |
| Phone:                            | Phone:                                  |  |
| Fax:                              | PO/SO:                                  | Present Suff CAN Suff Suff Suff Suff Suff Suff Suff Suf  |
| Sampler's Name (print)            | Sampler's Signature                     |  |
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| 110). 140.                        | NW. (HEXPLANCE WELL                     | 4 & & & & & & & & & & & & & & & & & & &  |
| Date Time Can# Id                 | Complete)                               | TO-14VOCs + DYESE TO-15VOCs + DYESE TO-1 and/or TO-2 VOCs Headspace (Please Specify NOLD ID (Plane)  TOS by GC/MS SCAN MOLD ID (Plane)  TO TO-1 and/or TO-2 VOCs TO TO-1 an |
| 5-5-10 9:38 145                   | LU                                      | X 6D10-0087-1  |
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| Relinguished by: (Signature) Date | 70:45 Time Received by: (Signature)     | Date Time Cov 3 couns + Fe + Voc's + S2  |
| Relinguished by: (Signature) Date |   | The scorist is   |
|                                   | 1 Donoops                               | Any change for Analysis Request should be submitted by a written document.   |
|                                   |   |  |



**CLIENT: Deborah Rogers** 

Project No.:

GD Air Testing Lab. ID:

GD10-0087-001

Report Date:

18-May-10

Date Analyzed: Analyzed by:

13-May-10

GD Air QC Batch:

LAJ

Method:

QC-051310TO14

EPATO14

NELAP Certification #:

T104704364-09-TX

#### REPORT OF ANALYTICAL RESULTS

Page 1 of 2

| SAMPLE DESCRIPTION                    | MATRIX SAMPLE BY |                | SAMPLED DATE /RECEIVED |          |          |     |
|---------------------------------------|------------------|----------------|------------------------|----------|----------|-----|
| All the strong in terrology           | Air              | Deborah Rogers |                        | 05/05/10 | 05/06/10 |     |
| CONSTITUENT                           | MW               | CAS            | PQL*                   | RESULT   | N        | OTE |
|                                       |                  |                | ppbv                   | ppbv     | ug/cu M  |     |
| Benzene                               | 78               | 71432          | 0.26                   | 1.24     | 3.96     |     |
| Benzylchloride                        | 126.6            | 100447         | 0.26                   | ND       | ND       | N   |
| Bromomethane (Methyl Bromide)         | 94.9             | 74839          | 0.26                   | ND       | ND       |     |
| Carbon tetrachloride                  | 153.8            | 56235          | 0.26                   | ND       | ND       |     |
| Chlorobenzene                         | 112.6            | 108907         | 0.26                   | ND       | ND       |     |
| Chloroethane (Ethyl Chloride)         | 64.5             | 75003          | 0.26                   | ND       | ND       |     |
| Chloroform                            | 119              | 67663          | 0.26                   | ND       | ND       |     |
| Chloromethane (Methyl Chloride)       | 50.4             | 74873          | 0.26                   | 0.50     | 1.04     |     |
| 1,2-Dibromoethane (EDB)               | 187.9            | 106934         | 0.26                   | ND       | ND       |     |
| 1,2-Dichlorobenzene                   | 147              | 95501          | 0.26                   | ND       | ND       |     |
| 1,3-Dichlorobenzene                   | 147              | 541731         | 0.26                   | ND       | ND       |     |
| 1,4-Dichlorobenzene                   | 147              | 106467         | 0.26                   | ND       | ND       |     |
| 1,1-Dichloroethane                    | 99               | 74343          | 0.26                   | ND       | ND       |     |
| 1,1-Dichlorethene                     | 97               | 75354          | 0.26                   | ND       | ND       |     |
| Dichlorodifluoromethane (F12)         | 120.9            | 75718          | 0.26                   | 0.42     | 2.06     |     |
| Dichlorotetrafluoroethane (F114)      | 170.9            | 76142          | 0.26                   | ND       | ND       |     |
| 1,2-Dichloroethane (EDC)              | 99               | 107062         | 0.26                   | ND       | ND       |     |
| cis-1,2-Dichloroethene                | 97               | 156592         | 0.26                   | ND       | ND       |     |
| trans-1,2-Dichloroethene              | 97               | 156605         | 0.26                   | ND       | ND       | N   |
| Dichloromethane (Methylene chloride)  | 84.9             | 75092          | 0.26                   | ND       | ND       |     |
| 1,2-Dichloropropane                   | 113              | 78875          | 0.26                   | ND       | ND       |     |
| cis-1,3-Dichloropropene               | 111              | 10061015       | 0.26                   | ND       | ND       |     |
| trans-1,3-Dichloropropene             | 111              | 10061026       | 0.26                   | ND       | ND       |     |
| Ethylbenzene                          | 106              | 100414         | 0.26                   | 0.47     | 2.05     |     |
| Hexachlorobutadiene                   | 260.8            | 87683          | 0.64                   | ND       | ND       |     |
| Styrene                               | 104              |                | 0.26                   | ND       | ND       |     |
| 1,1,2,2-Tetrachloroethane             | 167.9            |                | 0.26                   | ND       | ND       |     |
| Tetrachloroethene (PCE)               | 165.8            |                | 0.26                   | ND       | ND       |     |
| Toluene                               | 92               |                | 0.26                   | 3.20     | 12.0     |     |
| 1,1,1-Trichloroethane (TCA)           | 133.4            |                | 0.26                   | ND       | ND       |     |
| 1,1,2-Trichloroethane                 | 133.4            |                | 0.26                   | ND       | ND       |     |
| 1,3,5-Trimethylbenzene/4-Ethyltoluene | 120.2            |                | 0.26                   | 1.26     | 6.19     |     |
| 1,2,4-Trimethylbenzene                | 120.2            |                | 0.26                   | 0.56     | 2.73     |     |
| 1,2,4-Trichlorobenzene                | 181.5            |                | 0.64                   | ND       | ND       |     |
| Trichloroethene (TCE)                 | 131.3            | 79016          | 0.26                   | ND       | ND       |     |

PAGE 2 OF 7



**CLIENT: Deborah Rogers** 

Project No .:

GD Air Testing Lab. ID:

GD10-0087-001

Report Date:

18-May-10

Date Analyzed: Analyzed by:

13-May-10

GD Air QC Batch:

LAJ QC-051310TO14

Method:

EPATO14

1.28

NELAP Certification #:

T104704364-09-TX

### REPORT OF ANALYTICAL RESULTS

Page 2 of 2

| SAMPLE DESCRIPTION               | MATRIX | SAMPLE BY             | S            | SAMPLED DATE /RECEIVED |          |      |  |
|----------------------------------|--------|-----------------------|--------------|------------------------|----------|------|--|
| 300 (Birth agirthm Lan           | Air    | <b>Deborah Rogers</b> |              | 05/05/10               | 05/06/10 |      |  |
| CONSTITUENT                      | MW     | CAS                   | PQL*<br>ppbv | RESULT<br>ppbv         | ug/cu M  | NOTE |  |
| Trichlorofluoromethane (F-11)    | 137.4  | 75694                 | 0.26         | ND                     | ND       |      |  |
| Trichloritrifluoroethane (F-113) | 187.4  | 76131                 | 0.26         | ND                     | ND       |      |  |
| Vinyl Chloride                   | 62.5   | 75014                 | 0.26         | ND                     | ND       |      |  |
| m&p-Xylenes                      | 106    | 1330207               | 0.26         | 2.62                   | 11.4     |      |  |
| o-Xylene                         | 106    | 95476                 | 0.26         | 0.93                   | 4.01     |      |  |
| TPH as DRO                       | 142    |                       | 0.60         | 40.0                   | 232      | s    |  |
| Surrogate Recovery Report        |        |                       | Spiked ppbv  | Found ppbv             | R%       |      |  |
| 1,4-Difluorobenzene (SS1)        | 118.1  | 540363                | 5.00         | 4.33                   | 87       |      |  |
| Bromofluorobenzene (SS2)         | 175    | 460004                | 5.00         | 2.22                   | 44       |      |  |

<sup>\*</sup>Comparison with the method blank this sample run with a dilution factor of:

Canister #145 was received at an initial pressure of -0.35psi and pressurized to 3.7psi.

Respectfully submitted GD Air Testing, Inc.

George Dai, Ph.D. Laboratory Director

Data File: varian\data\100513-8-0087-1.sms

Report File: GDAIR D:\Client-Report\GD10-0087-001

PAGE 3 OF 7

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compound (TIC).

S: Not in Scope of NELAC Accrediation.

<sup>\*</sup>RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

<sup>\*</sup> The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

<sup>\*</sup>Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

<sup>\*</sup>QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

CLIENT:

**Deborah Rogers** 

Project No .:

GD Air Testing Lab. ID: GD10-0087-001M

Report Date:

18-May-10

Date Analyzed:

13-May-10

Analyzed by:

GD Air QC Batch:

QC-051310TO14

Method:

GC/MS SCAN

NELAP Certification # T104704364-09-TX

#### REPORT OF ANALYTICAL RESULTS

Page 1 of 1

| SAMPLE DESCRIPTION   | MATRIX | SAMPLE BY   | S    | AMPLED DAT | E /RECEIVE | D   |
|--|--------|-------------|------|------------|------------|-----|
| COC. Marie III and Marie II and | Air    | Deborah Rog | ers  | 05/05/10   | 05/06/10   |     |
| CONSTITUENT  | MW     | CAS         | PQL* | RESULT     | N          | OTE |
|  |        |             | ppbv | ppbv       | ug/cu M    |     |
| Sulfur Gases by GC/MS  |        |             |      |            |            |     |
| Carbon Disulfide   | 76     | 75150       | 1.28 | 10.8       | 33.6       | N   |
| Carbonyl Sulfide   | 60     | 463581      | 1.28 | ND         | ND         | N   |
| Dimethyl Sulfide   | 62     | 75183       | 1.28 | ND         | ND         | N   |
| Dimethyl Disulfide   | 94     | 624920      | 1.28 | ND         | ND         | N   |
| Methyl ethyl Disulfide   | 108    | 20333395    | 1.28 | ND         | ND         | N   |
| Methyl propyl Disulfide  | 122    | 2179604     | 1.28 | ND         | ND         | N   |
| Butyl Mercaptan  | 90     | 109795      | 1.28 | ND         | ND         | N   |
| Isobutyl Mercaptan   | 90     | 513531      | 1.28 | ND         | ND         | N   |
| Ethyl Mercaptan  | 62     | 75081       | 1.28 | ND         | ND         | N   |
| Methyl Mercaptan   | 48     | 74931       | 1.28 | ND         | ND         | N   |
| Propyl Mercaptan   | 76     | 107039      | 1.28 | ND         | ND         | N   |
| Isopropyl Mercaptan  | 76     | 75332       | 1.28 | ND         | ND         | N   |
| tert-Butyl Mercaptan   | 90     | 75661       | 1.28 | ND         | ND         | N   |
| Diethyl Sulfide  | 90     | 352932      | 1.28 | ND         | ND         | N   |
| Diethyl Disulfide  | 122    | 110816      | 1.28 | ND         | ND         | N   |
| Dimethyl Trisulfide  | 126    | 3658808     | 1.28 | ND         | ND         | N   |

<sup>\*</sup>Comparison with the method blank this sample run with a dilution factor of:

Respectfully submitted GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: varian\data100513-8-0087-1.sms

Report File: GDAIR D:\Client\_Report\GD10-0087-1M

PAGE 4 OF 7

<sup>1.28</sup> 

Canister #145 was received at an initial pressure of -0.35psi and pressurized to 3.7psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compound (TIC).

<sup>\*</sup>RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

<sup>\*</sup>QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)



CLIENT: GD Air Testing, Inc.

Project No.:

GD Air Testing Lab. 1D:

Method Blank

Report Date: Date Analyzed: 05/14/10 05/13/10

Analyzed by: GD Air QC Batch: 05/13/10 LAJ QC-051310

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 1 of 2

| SAMPLE DESCRIPTION                    |       | SAMPLE BY              | SAMPLED DATE /RECEIVED |        |         |      |
|---------------------------------------|-------|------------------------|------------------------|--------|---------|------|
| BLK                                   | Air   |                        |                        |        |         |      |
| CONSTITUENT                           | MW    | CAS                    | PQL*                   | RESULT |         | NOTE |
|                                       |       |                        | ppbv                   | ppbv   | ug/cu M |      |
| Benzene                               | 78    | 71432                  | 0.20                   | ND     | ND      |      |
| Benzylchloride                        | 126.6 | 100447                 | 0.20                   | ND     | ND      | N    |
| Bromomethane (Methyl Bromide)         | 94.9  | 74839                  | 0.20                   | ND     | ND      |      |
| Carbon tetrachloride                  | 153.8 | 56235                  | 0.20                   | ND     | ND      |      |
| Chlorobenzene                         | 112.6 | 108907                 | 0.20                   | ND     | ND      |      |
| Chloroethane (Ethyl Chloride)         | 64.5  | 75003                  | 0.20                   | ND     | ND      |      |
| Chloroform                            | 119   | 67663                  | 0.20                   | ND     | ND      |      |
| Chloromethane (Methyl Chloride)       | 50.4  | 74873                  | 0.20                   | ND     | ND      |      |
| 1,2-Dibromoethane (EDB)               | 187.9 | 106934                 | 0.20                   | ND     | ND      |      |
| 1,2-Dichlorobenzene                   | 147   | 95501                  | 0.20                   | ND     | ND      |      |
| 1,3-Dichlorobenzene                   | 147   | 541731                 | 0.20                   | ND     | ND      |      |
| 1,4-Dichlorobenzene                   | 147   | 106467                 | 0.20                   | ND     | ND      |      |
| 1,1-Dichloroethane                    | 99    | 74343                  | 0.20                   | ND     | ND      |      |
| 1,1-Dichlorethene                     | 97    | 75354                  | 0.20                   | ND     | ND      |      |
| Dichlorodifluoromethane (F12)         | 120.9 | 75718                  | 0.20                   | ND     | ND      |      |
| Dichlorotetrafluoroethane (F114)      | 170.9 | 76142                  | 0.20                   | ND     | ND      |      |
| 1,2-Dichloroethane (EDC)              | 99    | 107062                 | 0.20                   | ND     | ND      |      |
| cis-1,2-Dichloroethene                | 97    | 156592                 | 0.20                   | ND     | ND      |      |
| rans-1,2-Dichloroethene               | 97    |                        | 0.20                   | ND     | ND      | N    |
| Dichloromethane (Methylene chloride)  | 84.9  | 75092                  | 0.20                   | ND     | ND      |      |
| 1,2-Dichloropropane                   | 113   |                        | 0.20                   | ND     | ND      |      |
| cis-1,3-Dichloropropene               |       | 10061015               | 0.20                   | ND     | ND      |      |
| trans-1,3-Dichloropropene             |       | 10061026               | 0.20                   | ND     | ND      |      |
| Ethylbenzene                          | 106   |                        | 0.20                   | ND     | ND      |      |
| Hexachlorobutadiene                   | 260.8 | 9 75 75 75 75 75       | 0.20                   | ND     | ND      |      |
| Styrene                               | 104   |                        | 0.20                   | ND     | ND      |      |
| 1,1,2,2-Tetrachloroethane             | 167.9 |                        | 0.20                   | ND     | ND      |      |
| Tetrachloroethene (PCE)               | 165.8 |                        | 0.20                   | ND     | ND      |      |
| Toluene                               | 92    |                        | 0.20                   | ND     | ND      |      |
| 1,1,1-Trichloroethane (TCA)           | 133.4 | 20 200 200 400 200 200 | 0.20                   | ND     | ND      |      |
| 1,1,2-Trichloroethane                 | 133.4 |                        | 0.20                   | ND     | ND      |      |
| 1,3,5-Trimethylbenzene/4-Ethyltoluene | 120.2 |                        | 0.20                   | ND     | ND      |      |
| 1,2,4-Trimethylbenzene                | 120.2 |                        | 0.20                   | ND     | ND      |      |
| 1,2,4-Trichlorobenzene                | 181.5 |                        | 0.30                   | ND     | ND      |      |
| Trichloroethene (TCE)                 | 131.3 |                        | 0.20                   | ND     | ND      |      |
| /                                     | .07.0 |                        | 0.20                   |        | PACE    | 05 - |
|                                       |       |                        |                        |        |         |      |



CLIENT: GD Air Testing, Inc.

QC

Project No.:

GD Air Testing Lab. ID:

NELAP Certification #:

Method Blank

Report Date: Date Analyzed: Analyzed by:

05/14/10 05/13/10

GD Air QC Batch:

QC-051310

Method:

EPATO14

T104704364

# REPORT OF ANALYTICAL RESULTS

Page 2 of 2

| SAMPLE DESCRIPTION MATRIX SAMPLE BY |       |         | SAMPLED DATE /RECEIVED |        |         |  |  |
|-------------------------------------|-------|---------|------------------------|--------|---------|--|--|
| BLK                                 | Air   |         |                        |        |         |  |  |
| CONSTITUENT                         | MW    | CAS     | PQL*                   | RESULT | NOTE    |  |  |
|                                     |       |         | ppbv                   | ppbv   | ug/cu M |  |  |
| Trichlorofluoromethane (F-11)       | 137.4 | 75694   | 0.20                   | ND     | ND      |  |  |
| Trichloritrifluoroethane (F-113)    | 187.4 | 76131   | 0.20                   | ND     | ND      |  |  |
| Vinyl Chloride                      | 62.5  | 75014   | 0.20                   | ND     | ND      |  |  |
| m&p-Xylenes                         | 106   | 1330207 | 0.20                   | ND     | ND      |  |  |
| o-Xylene                            | 106   | 95476   | 0.20                   | ND     | ND      |  |  |
| Surrogate Recovery Report           |       |         | Spiked                 | Found  | R%      |  |  |
|                                     |       |         | ppbv                   | ppbv   |         |  |  |
| 1,4-Difluorobenzene (SS1)           | 118.1 | 540363  | 5.00                   | 4.34   | 86.8    |  |  |
| Bromofluorobenzene (SS2)            | 175   | 460004  | 5.00                   | 2.72   | 54.4    |  |  |

\*Comparison with the method blank this sample run with a dilution factor of:

N: Not included in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compound (TIC).

\*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

\* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

\*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

Respectfully submitted GD Air Testing, Inc.

George Dai, Ph.D. Laboratory Director

Data File: c:\Varian\100513-7-blk.sms Report File: GD SRI\D\QC-10-TO14\Blank

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<sup>\*</sup>QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)



CLIENT: GD Air Testing, Inc.

Project No.:

GD Air Testing Lab. ID:

BS/BSD

Report Date:

05/14/10

Date Analyzed:

05/13/10

Analyzed by: GD Air QC Batch:

Method:

QC-051310

NELAP Certification #:

EPATO14 T104704364

## REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

| SAMPLE DESCRIPTION                   | MATRIX | SAMPLE BY | SAMPLED DATE /RECEIVED |           |        |       |
|--------------------------------------|--------|-----------|------------------------|-----------|--------|-------|
| BS/BSD                               | Air    |           |                        |           |        |       |
| Spike Control Compounds              | Spiked |           | Found a                | and Recov | ery    |       |
|                                      | ppbv   | BS/ppbv   | BS R%                  | BSD       | BSD R% | % RPD |
| VOLATILE ORGANICS BY EPA TO-14       |        |           |                        |           |        |       |
| Vinyl Chloride                       | 10.0   | 9.2       | 92                     | 9.3       | 93     | 1     |
| Methylene chloride (Dichloromethane) | 10.0   | 9.1       | 91                     | 9.1       | 91     | 0     |
| 1,1,1-Trichloroethane                | 10.0   | 9.1       | 91                     | 9.0       | 90     | 1     |
| 1,2-Dichloroethane (EDC)             | 10.0   | 9.1       | 91                     | 8.8       | 88     | 3     |
| Benzene                              | 10.0   | 7.1       | 71                     | 6.8       | 68     | 4     |
| Carbon tetrachloride                 | 10.0   | 7.4       | 74                     | 7.0       | 70     | 6     |
| Trichloroethene (TCE)                | 10.0   | 8.2       | 82                     | 8.0       | 80     | 2     |
| Toluene                              | 10.0   | 11.0      | 110                    | 11.4      | 114    | 4     |
| Chlorobenzene                        | 10.0   | 11.1      | 111                    | 11.1      | 111    | 0     |
| Ethylbenzene                         | 10.0   | 11.5      | 115                    | 11.3      | 113    | 2     |
| o-Xylene                             | 10.0   | 11.1      | 111                    | 11.1      | 111    | 0     |
| Surrogate Recovery Report            |        |           |                        |           |        |       |
| 1,4-Difluorobenzene (SS1)            | 5.0    | 4.25      | 85.0                   | 4.06      | 81.2   | 4.6   |
| Bromofluorobenzene (SS2)             | 5.0    | 2.66      | 53.2                   | 2.78      | 55.6   | 4.4   |

<sup>\*</sup> The control limit for BS Recovery % of all spiked compound is 70% - 130%

Respectfully submitted GD Air Testing, Inc.

George Dai, Ph.D. **Laboratory Director** 

Data File: VARIAN\100513-4-bs.sms and 100513-5-bsd.sms

Report File: GD\SRI\D:\QC-TO14\BS-BSD

PAGE 7 OF 7

<sup>\*</sup> The control limit for relative percentage difference of BS/BSD is 30%

<sup>\*</sup> If any control compound is not within the control limit, please see the case narrative for more details.

<sup>\*</sup> The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.